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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/533,955  | 05/04/2005  | Yasutaka Fujimoto    | 052494              | 6095             |
| 38834   | 7590        | 07/05/2006           |                     | EXAMINER         |
| WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP<br>1250 CONNECTICUT AVENUE, NW<br>SUITE 700<br>WASHINGTON, DC 20036 |             |                      | NGUYEN, TRAN N      |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2834                |                  |

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/533,955             | FUJIMOTO, YASUTAKA  |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Tran N. Nguyen         | 2834                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 2 is/are rejected.
- 7) Claim(s) 3 and 4 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 May 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____ .   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2 pages</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____ .                                   |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

Most of the drawings appear to be photographs that are not clear at all. *The applicant is hereby request to provide clear drawings, not photographs, with detail illustrating claimed subject matters of the invention.*

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claim 1** is rejected under 35 U.S.C. 102(\*) as being fully anticipated by **Kusumi Saburo** (JP-10-257751).

**Kusumi Saburo** discloses a spiral linear motor, comprising:

a rotator (1) including a center shaft and a spiral-shaped portion protruding in the radial direction, provided on the outer circumference of the center shaft; and  
a stator (11) comprising hollow magnetic poles forming a center space having a spiral-shaped groove (12) with the same pitch as the rotator, wherein the center shaft (2) of the rotator is within the hollow magnetic poles forming a center space of the stator;

the side face of the spiral-shaped portion of the rotator in the axial direction and the side face of the spiral-shaped groove of the stator in the axial direction are opposed to each other (fig 1); the spiral-shaped portion is rotatable in a spiral shape within the spiral-shaped groove of the hollow magnetic poles forming a center space; and the rotator moves linearly in the axial direction while rotating in a spiral shape with respect to the stator.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kusumi Saburo**, as applied in the rejection against the base claim, and in view of **Fukaya et al (US 4751411)**.

**Kusumi Saburo** discloses the claimed invention, except for the added limitations of the rotator has a permanent magnet on the spiral side face of the spiral-shaped portion.

Fukaya, however, teaches a motor comprising a rotor having permanent magnet on the side face that facing the stator for the purpose of providing magnetic means to interact with the stator electromagnetic fields for enhancing the output of the motor. Those skilled in the art would understand that rotors having magnet is well known in the art.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the spiral linear motor by providing the rotor with magnet on the side face that facing the stator, as taught by Fukaya. Doing so would provide magnetic means to enhance the

magnetically interaction therebetween the stator and the rotor for the motor to produce enhanced output.

***Allowable Subject Matter***

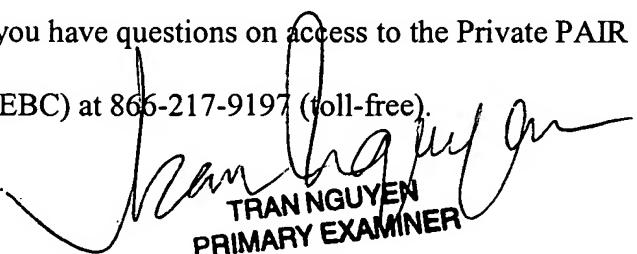
Claims 3-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (571) 272-2030. The examiner can normally be reached on M-F 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
TRAN NGUYEN  
PRIMARY EXAMINER